



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-----------------------|---------------|----------------------|--------------------------|-----------------|
| 10/622,380 | 07/18/2003 | Howard R. Samuels | 2550/168 | 4373 |
| 75 | 90 09/03/2004 | | EXAMINER | |
| Jeffrey T. Klayman | | | CHAPMAN JR, JOHN E | |
| Bromberg & Su | | | ART UNIT | PAPER NUMBER |
| 125 Summer St | | | | 1711 EK NOMBEK |
| Boston, MA 02110-1618 | | | 2856 | |
| | | | DATE MAIL ED: 00/02/2004 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | ~~~ | - | | | | |
|---|---|---|--|--------------|--|--|--|--|
| Office Action Summers | | Application No. | Applicant(s) | | | | | |
| | | 10/622,380 | SAMUELS ET AL. | | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | |
| | | John E Chapman | 2856 | | | | | |
| Period for F | The MAILING DATE of this communication a Reply | ppears on the cover sheet with the | correspondence address | | | | | |
| THE MA - Extensio after SIX - If the per - If NO per - Failure to Any reply | RTENED STATUTORY PERIOD FOR REP ALLING DATE OF THIS COMMUNICATION is of time may be available under the provisions of 37 CFR 1 (6) MONTHS from the mailing date of this communication. iod for reply specified above is less than thirty (30) days, a re- iod for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by statury areceived by the Office later than three months after the mail atent term adjustment. See 37 CFR 1.704(b). | I. 1.136(a). In no event, however, may a reply be ti eply within the statutory minimum of thirty (30) da id will apply and will expire SIX (6) MONTHS fron ute, cause the application to become ABANDON! | mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | |
| 1)⊠ Re | esponsive to communication(s) filed on 16 | August 2004. | | | | | | |
| | <u> </u> | nis action is non-final. | 9 | | | | | |
| 3)□ Si | nce this application is in condition for allow | vance except for formal matters, pr | osecution as to the merits is | | | | | |
| clo | osed in accordance with the practice under | r Ex parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | | | |
| Disposition | of Claims | | • | | | | | |
| 4)⊠ CI | aim(s) <u>1-32</u> is/are pending in the applicatio | on. | | | | | | |
| 4a) | 4a) Of the above claim(s) 3,4,6,12,13,15 and 19-32 is/are withdrawn from consideration. | | | | | | | |
| 5)□ CI | Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ CI | Claim(s) <u>1,2,5,7,9-11,14,16 and 18</u> is/are rejected. | | | | | | | |
| 7)⊠ CI | ☑ Claim(s) <u>8 and 17</u> is/are objected to. | | | | | | | |
| 8)□ CI | aim(s) are subject to restriction and | or election requirement. | | | | | | |
| Application | Papers | | | | | | | |
| 9)□ Th | e specification is objected to by the Examir | ner. | | | | | | |
| 10)□ Th | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | | |
| Ap | plicant may not request that any objection to th | e drawing(s) be held in abeyance. Se | e 37 CFR 1.85(a). | | | | | |
| Re | placement drawing sheet(s) including the согте | ection is required if the drawing(s) is ob | pjected to. See 37 CFR 1.121(d). | | | | | |
| 11)□ Th | e oath or declaration is objected to by the E | Examiner. Note the attached Office | Action or form PTO-152. | | | | | |
| Priority und | ler 35 U.S.C. § 119 | | | | | | | |
| a) | knowledgment is made of a claim for foreign All b) Some * c) None of: Certified copies of the priority document Copies of the priority document Copies of the certified copies of the priority document Copies of the certified copies of the principle application from the International Bure the attached detailed Office action for a list | nts have been received. nts have been received in Applicationity documents have been receiveur (PCT Rule 17.2(a)). | ion No ed in this National Stage | | | | | |
| 566 | The attached detailed Office action for a list | st of the certified copies flot receiv | | | | | | |
| Attachmont(s) | | | | | | | | |
| Attachment(s) 1) Notice of | References Cited (PTO-892) | 4) 🔲 Interview Summary | / (PTO-413) | | | | | |
| 2) 🔲 Notice of | Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | ate | | | | | |
| | on Disclosure Statement(s) (PTO-1449 or PTO/SB/08 o(s)/Mail Date <u>3/1/04; 8/16/04</u> ; 5/3/04, | 8) 5) ☐ Notice of Informal (6) ☐ Other: | Patent Application (PTO-152) | | | | | |

Application/Control Number: 10/622,380 Page 2

Art Unit: 2856

DETAILED ACTION

1. Applicant's election without traverse of Group I, Fig. 11 in the reply filed on 16 August 2004 is acknowledged.

- 2. Claims 3, 4, 6, 12, 13, 15 and 19-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention or species, there being no allowable generic or linking claim.¹
- 3. The drawings are objected to because they are not of sufficient quality to permit adequate reproduction. In addition, the drawings do not include the reference sign "128" mentioned in the description (page 12, line 12). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

¹ It is noted that applicant considers claim 24 readable on the species of Fig. 11. However, claim 24 depends upon claim 19, which recites "sensing fingers ... affixed to the mass support structures proximate to the at least one anchor." Claim 19 is readable on the species of Fig. 8 and not Fig. 11. Consequently, claims 19-28 have been withdrawn from further consideration as being directed to a nonelected species.

Page 3

The disclosure is objected to because of the following informalities: The material on page 9, line 1, to page 11, line 14, appears to be directed to be a summary of the invention and not to a "Detailed Description of a Preferred Embodiment." The "Detailed Description of a Preferred Embodiment" appears to start on page 12, line 1.

Appropriate correction is required.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 9 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what is meant by "the mass support structures support the mass within the mass' inner periphery toward the mass' outer periphery." Since the mass support structures are positioned within the inner periphery (claim 1, line 5), they would appear to necessarily support the mass within the mass' inner periphery toward the mass' outer periphery. It is not clear how the mass support structures can be positioned within the inner periphery and not "support the mass within the mass' inner periphery toward the mass' outer periphery." Hence, it is not clear whether claim 9 further limits claim 1. Likewise for claim 18 with respect to claim 10.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 10/622,380 Page 4

Art Unit: 2856

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 2, 5, 9-11, 14 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Zerbini et al.

Zerbini et al. discloses an accelerometer comprising a substrate 6, a mass 4 having a plurality of elongated fingers 5, springs 8 affixed to the substrate by anchors 30 for supporting the mass, and elongated sensing fingers 9 for sensing movement of the mass.

Regarding claim 2, the bent portion of spring 8 comprises a suspension spring, and the elongated portion of spring 8 connecting the bent portion to the anchor comprises a support arm.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zerbini et al.

The only difference between the claimed invention and the prior art consists in affixing at least one elongated sensing finger to the substrate using a single elongated anchor. Zerbini et al. provide actuator arms 17a, 17b with actuator electrodes 19a, 19b, wherein arm 17a comprises an elongated anchor. It would have been obvious to one having ordinary skill in the art to fashion

the sensing arms 9a, 9b similar to the actuator arms 17a, 17b, wherein one arm comprises an elongated anchor.

11. Claims 7 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zerbini et al. in view of Koury, Jr. et al.

The only difference between the claimed invention and the prior art consists in affixing at least one elongated sensing finger to the substrate using a single elongated anchor. Koury, Jr. et al. provide sensing fingers 30, 32, wherein finger 32 is affixed by an elongated anchor 34. It would have been obvious to one having ordinary skill in the art to fashion the sensing arms 9a, 9b of Zerbini et al. similar to the sensing fingers 30, 32 of Koury, Jr. et al., wherein one arm comprises an elongated anchor.

- 12. Claims 8 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Offenberg discloses an acceleration sensor wherein fingers 21 are supported by multiple anchors 5.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E Chapman whose telephone number is (571) 272-2191. If

Application/Control Number: 10/622,380 Page 6

Art Unit: 2856

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John E Chapman Primary Examiner Art Unit 2856